Swarms of Bibionid Flies

Very high numbers of orange-brown bodied, flying insects were seen during November 2011 in two areas of north-east metropolitan Melhourne — in Greensborough on grass, predominantly *Microlaena stipoides*, and in Yallambie on Prickly Tea-tree *Leptospermum continentale*.

The bodies of these insects were up to 10 mm long, orange-brown with a black, pronounced beak-like head and short, stout antennae. They had dark wings and a pair of knob-like halteres (Fig. 1). The legs were black; the two front legs had a distinctive large spine at the apex of the tibia (Fig 2). These insects were very weak flyers and high numbers of them were walking around on the ground under the shrub or just resting on the grass.

Fig. 1. Orange-brown body and dark wings of a female *Bibio imitator*.

Fig 2. *Bibio imitator*: large spur at the apex of the tibia on the front leg (arrow).

The distinguishing features (the single pair of wings coupled with the small, balancing halteres) place these insects in the order Diptera or True Flies. Final identification was by reference to Hardy (1982), and to CSIRO (1993) which confirmed the species as *Bibio imitator*. All insects seen in both areas were females; however, later, one mating pair was observed in Ivanhoe — the male was smaller, dark to almost black and dragged along the ground by the female. The adult insects are believed to be nectar feeders while the larvae feed on decaying plant material and are found in the soil.

These flies are known in Europe as March Flies (due to time of appearance, and not their biting habits!) and in USA as Love Bugs. The family Bibionidae is cosmopolitan, with species found world-wide. Adults emerge synchronously and often form dense mating aggregations with males forming loose swarms and mating with females as they emerge from the soil. The females then dig a small chamber in the soil, using the specially adapted tibia on their front legs, lay their eggs and die. The adults have short lives of three to seven days (Fitzgerald 2005).

These sightings were the first time either observer had seen these insects although *Bibio imitator* is widespread in Australia and believed to be quite common.

References

BugGuide web site http//Bugguide.net/node/view *Evolution and classification of Bibionidae (Diptera: Bibionomorpha*

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